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ABSTRACT

We explore if investors use signals of founding family governance (ownership, involvement in management, board representation) when making investment choices in an experimental setting. We link the literature on heterogeneous preferences of investors to signalling theory, and apply it in the context of founding family governance by exploring the presence of investor clusters with varying utility functions with respect to founding family governance. We show that nonprofessional investors use these signals in their investment choices. Latent class analysis identifies three distinct clusters within our sample that have conflicting utility curves with respect to founding family governance.

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INTRODUCTION

Families control a majority of public and private firms in the world (La Porta, Lopez-de-Silanes, and Shleifer [1999]), and the corporate governance literature explores how family governance impacts performance and firm value. This research focuses on the aggregate market level outcomes in the form of a relationship between family control and Tobin's *q* or price-to-book values (for example Anderson and Reeb [2003] and Villalonga and Amit [2006] who explored the issue in the U.S.; and Maury [2006] in Europe). However, these aggregate market values are the joint product of any potential wealth enhancing effect a family may have and how investors react to information about the family's involvement in the firm. Furthermore we know from the behavioural finance literature that individual investors employ a number of heuristics in their decision making such as company affect that may impact individual decision-making (Aspara and Tikkanen [2010], [2011]).

Studying aggregate market values of family firms ignores these underlying behavioural issues as only the outcome of these processes are observed, rather than the decisions themselves. We do not know how individual investors use signals of family governance when making investment decisions. Moreover, these individuals may not have uniform heuristics processes and may thus not interpret information in a similar fashion (Bailey, Kumar, and Ng [2011]). The behavioural finance literature challenges traditional assumptions and suggests that investors are not necessarily fully rational, nor unbiased, and may act on information signals differently. There may be significant clusters of investors with positive or negative bias towards family firms. These biases are distinct from the actual impact the family has upon the firm, as the bias is part of the cognition of individual investors. Overall, we still have very little knowledge with respect to the way investors interpret and use signals related to founding family governance, and if this information influences their investment choices.

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We address this gap in the research and explore if investors use signals of founding family governance (ownership, involvement in management, board representation) when making investment choices. As founding family governance may enhance or diminish shareholder wealth, we posit that investors will use these signals when choosing a firm to invest in. Furthermore, we respond to calls in research (Carcello, Hermanson, and Ye [2011]), and use an experimental approach in testing our hypotheses to provide causal evidence on the issue.

Our study provides three primary contributions. First, we link signalling theory to founding family governance, to provide an explanation for why market values may be impacted by founding family governance. Prior work has primarily considered the actions of family owners and their effect on firm values. However, firm values are also influenced by the choices of investors, and how they interpret signals in the marketplace. To this end, we focus on the choices of investors in our study. Second, we use an experimental approach in our study and provide causal evidence on the signalling effect of founding family governance. Researchers have to date largely used archival data in exploring the outcomes of family governance (Anderson and Reeb [2003], Villalonga and Amit [2006]). However, this limits the research community to making correlational claims with respect to any effect. Third, we link the literature on heterogeneous preferences of investors to signalling theory, and apply it in the context of founding family governance by exploring the presence of clusters of investors with varying utility functions with respect to founding family governance.

We structure our paper as follows. In the hypothesis development, we review the peculiarities of family governance, and use signalling theory, and agency theory in hypothesizing its effect upon investor decision-making. In the method section, we describe the experiments that we use to test our hypotheses. We then present our results, with a focus upon analysing the heterogeneous preferences of investors. Finally, we discuss our findings in light

of our hypotheses and the prior research, and conclude by identifying avenues for further research.

THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

Founding Family Ownership

The majority of corporate governance research focuses on publicly listed firms. Recently, researchers have started to accept the notion that these publicly listed firms are diverse in nature, and that a significant portion of these firms are controlled by the founding family (Bhaumik and Gregoriou [2009]). Family firms are the most predominant business structure in the world (La Porta et al. [1999]), as roughly 65% to 80% of the world businesses can be deemed as family firms. Additionally, there is a common misconception that these firms are small and thus insignificant to the economy. However, family firms contribute 45% to 70% to a country's GDP (Astrachan and Shanker [2003]). Furthermore, roughly a third of all publically listed firms in the world are family firms (Anderson and Reeb [2003], Maury [2006], Sraer and Thesmar [2007]). These factors together establish the prevalence and the significance of family firms in the economy.

Prior research has suggested that family firms differ significantly from non-family firms, both in terms of managerial practices and financial performance (Anderson and Reeb [2003], Miller and Le Breton-Miller [2005], Villalonga and Amit [2006]). The most notable difference is the long-term orientation of the family firm. Family firms are managed with future generations in mind, resulting in a decrease in myopic behaviour (James [1999]). Families manage the family wealth through time for the benefit of future generations and in many cases this means managing the family firm through time as the vessel containing and growing the family wealth (James [1999]). However, the focus on the family and its future wealth benefits can also lead to detrimental effects for minority shareholders if the family uses their ability to

control the firm for personal gain (Wang [2006]).

The evidence from the family business literature is grounded in the asset-pricing literature, which focuses on aggregate market values. However, it is important to understand the preferences of individuals in order to understand these aggregate market values. Recent behavioural finance research argues that aggregate asset prices may not be indicative of individual behaviour in markets (Blackburn and Ukhov [2013]). Further adding to the problem is the widespread use of archival capital markets data by the family firm literature, understanding market behaviour of individuals is quite difficult without detailed information about market participants and their decisions on an individual level (Coval and Shumway [2005]). Meaningful conclusions about the underlying behaviour are not possible through aggregate data. For example, while the aggregate effect of family governance upon market value may be observed as small or null, the underlying individuals may have strong preferences for or against family governance.

Founding Family Governance Signals to Investors

Investors have access to a variety of information, which they process and use when making investment choices (Nagy and Obenberger [1994]). While there exists information asymmetry between insiders and outside investors, this asymmetry can be reduced by signalling and increasing the information flow (Hughes [1986]). Within the specific context of family firms, these information asymmetries may be of greater importance as investors may perceive the agency risks to be elevated for these firms (Schulze, Lubatkin, Dino, and Buchholtz [2001]). Prior work on signalling theory has not considered founding family governance as a potential signal. However, related work has touched upon managerial ownership (Bruton, Chahine, and Filatotchev [2009], Goranova, Alessandri, Brandes, and Dharwadkar [2007], Jain, Jayaraman, and Kini [2008]), CEO background and legitimacy (Cohen and Dean [2005]), and board

structure (Certo, Covin, Daily, and Dalton [2001], Sanders and Boivie [2004]) as potential signals that may limit information asymmetry and provide relevant information to investors. Consequently, family ownership, management, and board representation of the firm may be considered as signals by investors. Changing any of these factors will be costly for the family, thus the benefit of the signal must outweigh the cost of change. However, the effect of this signal is dependent upon outside investors attitudes towards family firms. If they believe that a high level of family governance enhances shareholder wealth, then we would expect them to have a higher likelihood of investing in a firm. We consider the impact of three founding family governance dimensions: ownership, management and board representation.

Agency theory identifies two competing effects of family ownership on shareholder wealth: the alignment effect (typical *Type I* agency conflict) and the entrenchment effect (typical *Type II* agency conflict) (Wang [2006]). According to the alignment effect, family ownership has the potential of diminishing *Type I* agency conflicts by exerting greater managerial monitoring. In these firms, family members often hold senior positions, virtually eliminating *Type I* agency conflicts (Bhaumik and Gregoriou [2009]) as there exists natural alignment between owners and managers. However, even in cases where the family uses a professional manager the undiversified nature of the family's investment portfolio incentivises them to carefully monitor the manager and decrease the incentive for opportunistic management behaviour (Prencipe and Bar-Yosef [2011]). Anderson et al. ([2003]) found that family firms are able to derive a lower cost of debt, thus indicating that bond-holders perceive family ownership as a superior ownership structure. Furthermore, the bridging of the family's reputation and the firm's reputation provides an incentive for the family to use their position in the firm in an appropriate manner (Miller and Le Breton-Miller [2005], Wang [2006]).

There is however a large amount of literature that argues that concentrated ownership, such as family ownership, may lead to an increase in *Type II* agency conflicts through the

entrenchment effect (Morck, Shleifer, and Vishny [1988], Schleifer and Vishny [1997]). In these situations, the controlling shareholders have an incentive to opportunistically expropriate wealth from minority shareholders. Moreover, one of the primary characteristics of family firms is the desire for continuity across generations and preservation of socio-emotional wealth (Miller and Le Breton-Miller [2005]). This has the potential to detrimentally impact the firm as the family may be using their power to prioritize firm survival rather than maximization of shareholder wealth (Prencipe, Markarian, and Pozza [2008]). The investors may thus perceive family firms to be entrenched and self-interested.

While agency theory provides competing views about the impact of the family ownership signal, it does not consider the individual interpretation of the signal. Two individuals receiving the same signal may react in very different ways. This can be related to the underlying principles of prospect theory, in that decision-makers (in our case investors) may have heterogeneous decision weights that they apply in their choices, and how they evaluate the prospect (Kahneman and Tversky [1979]). The evaluation is about the relative utility rather than absolute levels. In practice, this reference dependence may manifest itself in an investor comparing family and non-family firms but also the levels of family involvement. Furthermore, when evaluating the levels of family involvement there may be diminishing sensitivity when it comes to the investor's utility.

Additionally, from the psychology literature we know that individuals use a number of heuristics in their decision making, as a way to simplify complex tasks and increase cognitive efficiency (Bailey et al. [2011]). When it comes to the interpretation of the family governance signal there are two specific heuristics that may be used by investors. First, representativeness is a heuristic that can be used to quickly judge an investment option based on superficial characteristics (the signal), rather than underlying probabilities relating to those characteristics. In other words, individuals that have a positive attitude towards family businesses in general

may be biased to invest in family firms even when presented with better alternative investment opportunities. Second, familiarity is a heuristic that leads to individuals investing in firms with characteristics that are familiar to them. This has most often been used to explain the home bias effect, meaning that investors usually prefer to invest in domestic stocks, leading to increased portfolio risk. Familiarity can also be used to explain individuals' preferences with respect to family ownership. If an individual has worked or is from a family business, then they may be more familiar with this business structure. Consequently, when presented with different investment choices they will tend to choose the more familiar option and prefer family businesses as compared to non-family businesses.

As the behavioural literatures acknowledge that individuals have varying biases and agency theory provides competing views on the effects of family ownership upon shareholder wealth, we choose to use a non-directional hypothesis for this study. We simply posit that investors will use the level of family ownership as a signal when making investment decisions.

H1: Investors use signals of founding family ownership in investment decisions.

It is also important to differentiate between family firms where the firm uses a professional manager and family firms where the CEO position is held by a family member. Similar to non-family firms, family firms with professional CEOs may be considered by investors to suffer from *Type I* agency problems. While the concentrated ownership of the family signals greater monitoring; the manager still may act opportunistically (Yang [2010]). On the other hand, family members in the CEO position can ensure that the family is able to control the firm effectively and according to the wishes of the family (Wang [2006]). As such, investors may prefer either family or non-family CEOs, as their position within the firm may act as a signal of potential agency issues that impact shareholder wealth. If the family firm is opportunistic and extracts benefits from minority shareholders, then we can expect a family

member in the CEO position to increase this effect as the family then has greater control and more opportunities to act self-interested. However, if family firms have better corporate governance and the family acts in the best interest of the firm, a family member serving as the CEO may further improve this positive effect. They will be able to ensure that the family's strategic direction is implemented.

With respect to the interpretation of the signal, ownership by itself does not imply active involvement by the family in the governance of the firm. One way to increase influence is by having a family member serve as the CEO. Further, the representativeness and familiarity bias would suggest that if an individual is biased towards and against family firms then this bias may extend to the degree of family involvement, the CEO's family member status is then considered to be an important decision cue. Consequently, we posit that investors may use this information as a signal and consider the family relation of the CEO when making investment choices.

H2: Investors use signals of the family relation of a CEO when investing in family firms.

In addition to exerting influence through its ownership or by having a family member act as the CEO, the family may also have members of the family present on the board of directors. These directors may further align the firm's objectives with the objectives of the family (Corbetta and Salvato [2004]). The members of the board have previously been considered as potential signals to investors, however this has primarily been within IPO contexts (Certo [2003]). Similarly, for a family firm, the decision to allocate a certain number of board seats to non-family members provides a signal to outside investors with respect to the credibility of the firm and also the family's ability to influence the strategic direction (Anderson and Reeb [2004]). If a large proportion of directors have family ties the agency costs may be increased, however the alignment of the directors' values with the wishes of the major shareholders may

also have benefits through congruence surrounding the strategic direction of the firm. Once again, we posit that representativeness and familiarity bias may lead to individuals using signals relating to the family's representation on the board in their decision process, as their bias in relation to family firms may be dependent on the degree of involvement in all aspects of governance.

H3: Investors use signals of the family's representation on the board of directors when investing in family firms.

The hypotheses thus far have not explicitly addressed the possibility that investors may hold a diverse range of preferences with respect to the desired level of founding family involvement in a publicly listed firm. The assumption of investor homogeneity is widespread in the family firm literature, as it has to date only considered the heterogeneity on the supply side, namely within family firms (King and Santor [2008]). However, firm values are not only determined by a firm's future performance but also by the actions and choices of investors. According to prospect theory we would expect that there are varying utility functions amongst investors. Furthermore, the choices and actions relating to buy, sell, or hold decisions are influenced by the beliefs and values investor hold towards founding family involvement. Consequently, if investors have heterogeneous preferences, it may be difficult to find a generalizable effect of family governance. The notion that investors may hold heterogeneous preferences has been studied extensively in asset pricing literature (Basak [2005], Michaely and Vila [1995], Wang [1996]). It has further been shown that while investors hold heterogeneous preferences that they may be clustered together based on similarities in biases and preferences (Bailey et al. [2011], Bateman, Islam, Louviere, Satchell, and Thorp [2011], Clark-Murphy and Soutar [2005], Wood and Zaichkowsky [2004]). Differences between the aggregate and individual preferences can be large, and clusters allow us to generalize and understand what drives the underlying phenomenon, both at an aggregate and individual level

(Wood and Zaichkowsky [2004]). Consequently, we posit that investors' preferences cluster with respect to the level of founding family governance.

H4: There are clusters of investors with varying utility functions with respect to founding family governance.

METHOD

We use two stated preference experiments to test our hypotheses, where participants are presented with multiple realistic purchasing (in our case investment) options and asked to choose their preferred option (Louviere, Hensher, and Swait [2000]). By using this method, we assess the causal effect that signals of founding family governance may have upon the investment decisions of nonprofessional investors. It also allows us to ensure the observability of the signal, as the investors are presented with limited information in their experimental tasks (Bateman et al. [2011], Bateman, Stevens, and Lai [2015], Louviere et al. [2000], McFadden [1973]). Stated preference experiments are consistent with prospect theory in that the individual's decision weights can be extrapolated from their preferences. Further, the methodology uses a relative decision-making framework rather than absolute, and is thus consistent with the principle of reference dependence within prospect theory as securities are compared to one another. Because stated preference experiments also provide us with the weighting for each level of the attribute (such as level of family ownership), we are also able to assess whether there is diminishing sensitivity surrounding the utility gained from family governance.

In experiment one, we present our participants with three alternative investment options in the retail sector with varying financial and ownership attributes. The participant is asked to select the option they prefer the most, and then select the option they prefer the least. Each

participant completes ten of these choice tasks, and each time the levels/values for the attributes change. Figure 1 presents an example of a choice task used in our first experiment.

< Insert Figure 1 here >

In experiment two, we present our participants with three alternative governance structures for a family firm in the retail sector with varying governance attributes. The participant is asked to select the structure they prefer the most, and then select the structure they prefer the least. Each participant completes ten of these choice tasks, and each time the levels/values for the attributes change. Figure 2 presents an example of a choice task used in our second experiment.

< Insert Figure 2 here >

The goal of experiment one is to ascertain if investors consider founding family ownership when making investment choices where they are free to choose between family and non-family firms. Effectively we are able to provide causal evidence with respect to H1. Whereas in experiment two, our goal is to ascertain the preferred governance structure within family firms specifically, and thus test H2 and H3.

Attributes

We select our attributes using preliminary interviews with nonprofessional investors. In these interviews we asked investors what type of information they use when making an investment choice and where they source their information. These interviews indicated that the overwhelming majority use various personal finance websites such as Yahoo Finance in their research prior to purchasing shares. We surveyed personal finance websites to assess what information is most commonly provided to nonprofessional investors, and how it is presented.

Based on this process we identified five primary financial attributes that are used in the choice process. These are: (1) net profit margin; (2) revenue growth; (3) return on assets; (4)

price-earnings ratio; and, (5) beta (risk). We used a major retail company to assess probable values for each of these financial attributes. These attributes and their respective levels are listed in Table 1.

< Insert Table 1 here >

To assess the influence of founding family ownership and governance structure we use four governance attributes. These are: (6) founding family ownership; (7) institutional and mutual fund owners; (8) the family relation of the chief executive officer; and, (9) the number of family members on the board of directors. The first two governance attributes are used in both experiment one and two, whereas the last two are only used in experiment two. We choose the governance attributes based on their importance in the family firm literature and on their availability to nonprofessional investors. Information on major shareholders is readily available to investors on personal finance websites and we use similar phrasing to increase the realism of our tasks. As these attributes are categorical we are able to observe the diminishing sensitivity with respect to the utility an investor receives from investing in a security that exhibits those attribute levels.

Participants

We recruit 250 nonprofessional investors from an online research panel, administrated by the market research firm Cint. These nonprofessional investors were asked to participate in a study in exchange for a fixed nominal monetary reward that was provided by the market research firm. While the monetary reward is fixed the market research firm has quality controls that excludes participants for behaviour such as random responding, illogical or inconsistent responding, and completing the questions too quickly (speeding). The participants were selected based on their country of residence (United States) and their status as a stock market investor. Specifically, a screening question was used to assess the types of financial products

held by the potential participants, and only individuals who indicated that they held stocks were then invited to complete the study. We chose to limit our participants to a single country to avoid institutional and cultural effects on our results. In contrast to prior research that has often used student samples as proxies for nonprofessional investors we used an online market research panel to assist us in recruiting actual nonprofessional investors.

Procedure

We conduct our experiment in an online setting. The participants are given instructions. In the first stage, they proceed to experiment one where they complete ten investment choice tasks. Once completed, they proceed to the second stage, where they complete the ten investment choice tasks as part of experiment two. In their third stage, they answer a number of questions relating to their attitude and experience with family businesses. Lastly, they provide demographic details. The median time to complete the procedure was 19.5 minutes.

Covariates

We measure a number of additional nonexperimental factors that we use to explain the variability in the decision-weights with respect to family governance preferences. We assess the attitude towards family businesses by modifying a well-used reputation measurement scale that asks participants to rate how they perceive family businesses on a number of dimensions (quality, innovativeness, human resources, social responsibility, trustworthiness, management, competitiveness, profit-drive, long-term investment value) (Fombrun and Shanley [1990], McGuire, Schneeweis, and Branch [1990]). See appendix A for details of the reputation measurement scale. We use principal component analysis to reduce this nine item scale to a one item factor that represents the participant's attitude towards family businesses. In addition, we ask participants if they have worked in a family business or if their family owns a business. We conjecture that these attitudes and prior experiences are the antecedents to the underlying

preferences and biases of individuals. We also gather demographical data on our participants (gender, age, ethnicity, education, employment, investment experience, investment activity). Finally, we also posit that an investor's investment horizon and risk tolerance may influence their decision to invest in a family firm and thus assess these two variables by adopting two questions from the Survey of Consumer Finances, which is widely used in prior research (Jianakoplos and Bernasek [1998], Roger and Suarez [1983]). See appendix A for details of the investment horizon and risk tolerance measures.

Coding

We use a logit model to assess the attributes and their level's influence on the choices of investors. Each participant completed 10 investment choice tasks where they selected the most and least preferred choice between three options (A, B, and C). We explode the dataset by coding for pseudo observations. For example, if the participant chooses A as their most preferred and C as their least preferred then we have two sets of observations. In the first set of three options, we code option A as 1 and options B and C as 0. In the second set of the two remaining options, we code option B as 1 and option C as 0. This coding provides 5 observations per task, comprised of two choice sets. As the participants each complete 10 investment choice tasks, we collect 50 observations per participant for each experiment.

Analysis

The data from the experiment is analysed using an indirect utility function in accordance to random utility theory (McFadden [1973]), where the dependent variable is choice. As the choices are conditional on the alternatives being presented in each task (thus accounting for reference dependence), the conditional logit model (CLM) is used to estimate the utility function of the participants. As we have coded for pseudo observations, our conditional logit model is effectively identical to a rank ordered logit model.

However, these main results from the conditional logit model do not account for heterogeneous preferences amongst participants. To model the heterogeneous preferences amongst participants, latent class analysis is used to uncover clusters (groups) within participants that have distinct utility functions. We perform the latent class analysis using the expectation maximization (EM) algorithm (Dempster, Laird, and Rubin [1977]) and the Newton-Raphson algorithm (Lindstrom and Bates [1988]). These algorithms go through an iterative process of finding latent clusters within our sample that have homogenous utility functions. Subsequently, the conditional logit model is used to fit a utility function for each distinct homogenous cluster.

In our robustness procedures, we also employ a mixed logit model to address any remaining unobserved variability within the latent clusters. This ensures that our results are not sensitive to the assumption of homogeneity within the latent clusters.

RESULTS

Demographic Statistics

We begin by reviewing the demographical information of our participants that is shown in Table 2. The sample was balanced with respect to gender, with 52% men and 48% women. Additionally, the age demographics of our sample show a fairly balanced distribution across the age groups, with only 7% of participants being between 18-24 years old. Roughly 88% of our participants had some form of college education, with Bachelor's degree holder being the most common and representing 39% of the sample, whereas 22% had a Master's degree or above. As a result of our participants being older, their investment experience is quite extensive, 39% of our sample has been involved in trading stocks for over 10 years and the most common level of trading activity is between 20-29 trades per year (41%). While the participants have diverse investment horizons, the most common one is a few months (32%)

< Insert Table 2 here >

Experiment One

We present our results from experiment one in Table 3. Exploring the results from the pooled conditional logit model it appears that the participants used the majority of attributes in their decision-making.

< Insert Table 3 here >

Expectedly, participants prefer higher net profit margins, higher revenue growth, and higher return on average assets. However, information with respect to price-to-earnings ratios or beta was not widely used in decision making when looking at the pooled model, with participants only preferring a beta value of 1.2 over 1.4. Focusing on H1, and the usage of family ownership as a signal, we find evidence of a positive effect of family ownership upon the likelihood of investment choice. However, we observe that the likelihood of choice is highest at 20% family ownership. The largest shift in likelihood of choice is from 0% to 10%, meaning that we find evidence of diminishing sensitivity when it comes to the level of family ownership. We also find a positive effect for the ownership level of mutual funds and institutional holders. In general, investors appear to view signals of block ownership in a positive light, irrespective if the blockholder is a family or not.

To relax the assumption of investor homogeneity we use latent class analysis to identify clusters of investors with varying utility functions. We use a Newton-Raphson algorithm to maximize the log likelihood while maintaining parsimony and find a three cluster solution that we present in Table 3. Interestingly, the three clusters of investors have distinct decision-weights and thus utility functions with respect to founding family ownership. Cluster one, representing 31% of investors, have a positive utility function with respect to family ownership. However, the utility they derive from family ownership continues to rise after 20% ownership,

as 30% family ownership gives them the highest utility. Furthermore, the results also show that this cluster of investors pay strong attention to all forms of blockholders, and that these signals are more important than the financial information presented. In contrast, Cluster two, which make up 45% of the sample, have a negative utility function with respect to founding family ownership, as they prefer 0% family ownership versus 30%. Interestingly, this cluster also prefers 0% institutional ownership versus 30%, meaning that they seem to be averse to blockholders in general. Cluster three, which makes up 25% of the sample, has a strong negative utility function with respect to family ownership, while still preferring 10% institutional ownership over the baseline of 0%. Interestingly, this cluster does not use many of the other information in decision-making, meaning that the governance information appears to be very important for their decision making.

Experiment Two

In experiment two, we focus on the preferred governance structure within family firms. We present our results from experiment two in Table 4.

< Insert Table 4 here >

We begin by exploring the results from the pooled conditional logit model. We find that on average our participants prefer a family member to hold the CEO position. In contrast, we find a non-linear effect for the representation of family members on the board of directors. Investors most preferred the structure where 2 out of 8 board members are from the family, whereas if 6 out of the 8 board members are from the family then investors prefer to have no family representation at all. Similar to our results from experiment one we also find a positive effect of founding family ownership. However, we find that the utility continues to rise to 30% family ownership, whereas in experiment one the utility was maximized at 20% family ownership. However, while the utility continuous to rise to 30% family ownership, the

underlying utility function displays evidence of diminishing sensitivity as the is a decelerating increase (convex) in utility. Furthermore, we also find that investors have a positive attitude towards nonfamily blockholders.

We continue by exploring the latent class structure in our data. Similar to our results from experiment one we find a three cluster solution that maximizes the log likelihood of our models while maintaining explanatory parsimony. Cluster one shows a clear preference for family involvement in the governance structure of the firm and represents 40% of the respondents. Their utility is maximized when the CEO is a family member, 6 out of 8 directors are family members, and when the family holds 30% of the firm's shares. Furthermore, they also prefer the involvement of institutional and mutual fund owners in the firm. Cluster two, representing 21% of respondents, has a somewhat positive perception of family involvement in governance. While this cluster of investors do not care whether the CEO is a family member, they prefer 2 out of 8 board members to be family members. They also prefer higher levels of family ownership as well as institutional ownership. Similar to our findings in experiment one, cluster three representing 39% of respondents, has a negative preference for family involvement in the firm. These individuals prefer to have a non-family CEO, have no family members on the board, and have no family ownership in these firms. They also have a negative view of institutional owners.

Cluster Membership Prediction

To further understand the differences between clusters, we estimate a multinomial logit to explore the variation in attitudes towards family firms, exposure to family firms, and the demographics between clusters. Table 5 presents the results from our analysis. We use cluster one as the base outcome, which is positively disposed to family governance. We focus our discussion on the differences between cluster one and three, as these had a clear preference for and against family governance, whereas cluster two was somewhat more neutral.

In experiment one, we find that cluster three has a more negative attitude towards family businesses compared to cluster one. This is in line with our main results, which found that cluster three has a negative preference for family ownership. This suggests that the prior attitude towards family businesses can explain the preferences in the experiment. However, we do not find that being from or having worked for a family business can explain cluster membership. Consequently, we find evidence of a representativeness bias, whereas familiarity with family businesses is not able to explain cluster membership. When we look at the other demographics, there are other significant associations (such as ethnicity and investment activity), however, none of these map into systematic heuristics.

In experiment two, we similarly find that cluster three has a more negative attitude towards family businesses as compared to cluster one. In experiment two, membership in cluster one and three is greater than in experiment one, suggesting a more definitive separation between the preferences of participants. This could perhaps be due to the differences in the decision-task, as experiment one focused on family ownership versus non-family ownership, whereas experiment two considered broader governance issues within family firms. We reaffirm the pattern from experiment one, respondent attitudes to family firms correspond to cluster membership. Again suggesting that there is an underlying representativeness bias with respect to family governance. We also find that demographics can to some extent inform us about cluster membership with respect to family governance preferences. We find that cluster three is more educated than cluster one and have a somewhat shorter investment horizon.

Interestingly, in both experiment one and two, we do not find that risk tolerance is significantly related to cluster membership. This indicates that family governance is not considered to be a risk factor for investors.

< Insert Table 5 here >

Robustness

Substitution Effects. Our results from both experiments show that investors have clear preferences with respect to both family ownership and institutional ownership, and that these two attributes are both used by investors in their decision-making. However, it could be that investors do not discriminate between these two groups and view both family and institutional owners as blockholders. To investigate this, we explore any substitution effects (and at the same time complementary effects) between these two types of ownership structures. We interact the levels of these two attributes (for each level of ownership) and include them as explanatory variables in our analysis. We find that none of the interaction terms are significant in explaining investor choice. Consequently, we conclude that there is no substitution between family ownership and institutional ownership, meaning that investors see them as two different types of blockholders.

Assumption of homogeneity. In our robustness test we use a mixed logit model to account for any unobserved variability that may remain within each of the identified cluster. The results from these analyses do not change our conclusions and are thus omitted for brevity; however, it is worth noting that there is evidence of heterogeneous preferences within each cluster.

DISCUSSION

In this paper, we show that nonprofessional investors use signals of founding family governance in their investment choices. In the models that assume investor homogeneity, we find a positive effect of founding family ownership, management, and board representation upon the utility of nonprofessional investors. However, using latent class analysis we find that there are three distinct clusters within our sample that have conflicting utility curves with respect to founding family governance. In experiment one, where we focus on founding family

ownership in itself, we find that the two clusters that have a negative view of founding family ownership is larger. However, the smaller cluster of investors who have a positive utility function with respect to founding family ownership have a much stronger preference for investing in firms with high level of founding family ownership, leading to a positive net effect in the pooled model.

In experiment two, we find similar trends with respect to the latent structure of our data. The pooled model shows that participants have a positive view of family involvement in the governance of a family firm. However, using latent class analysis we again find three distinct clusters with conflicting utility curves. Cluster one has a clear preference for family involvement whereas cluster two is somewhat less positive. Interestingly, a number of participants that belonged to cluster two in experiment one, are now classified to belong to cluster one in experiment two. This implies that while these investors prefer to invest in non-family firm in general, if they are investing in a family firm, then they prefer the family to influence the governance of the firm.

Our findings are consistent with prospect theory, in that we observe the principle of reference dependence in the decision-making of investors as they compare investment alternatives with varying attributes. We also find evidence of diminishing sensitivity surrounding the utility investors gain from family ownership as the largest gain in utility is observed in the change from no family ownership to 10% family ownership. The overall results are also consistent with individuals using different decision-weights in their choices, as we find three clusters of investors with conflicting preferences in each experiment.

Why are heterogeneous preferences of investors important to the family business literature? The question is similar to that asked in the early experimental and behavioural finance literatures. It is the role of researchers to test the rational pricing assumption that

underpins the asset pricing literature as part of validating the theories that we use to explain and predict phenomena. Experiments simplify the complex world and allow us to test theoretical predictions. If the theory is valid then the predictions should still hold in the less complex world of experiments where we and observe the causal impact of exogenous changes the researcher introduces (Noussair and Tucker [2013], Sunder [2007]). In the family business literature, the assumption is that aggregate market behaviour is the rational outcome and thus a higher Tobin's *q* for family governed firms means that family involvement is value enhancing. However, the empirical literature is somewhat mixed on whether this is true or significant for all family governed firms. The conflicting results suggest a more complex underlying effect than the simple zero-one family effect studied to date.

Our results suggest that rather than an agency theory phenomenon we are actually dealing with heterogeneous preferences phenomenon similar to that found in the experimental asset pricing literature (Noussair and Tucker [2013]). We have identified that there are at least two significant clusters of investors with diametrically opposed views as whether family governance in firms is value enhancing or value destroying. Specifically, we find evidence of a representativeness bias, as the pro-family involvement cluster also has a positive attitude towards family firms. This finding is in line with the prior work of Aspara and Tikkanen [2008]] who found that company related attitudes is an antecedent to stock and product purchases. We believe that further work is needed to try and unravel why these investors hold these opposing views and perhaps how these attitudes are generated.

Our study has several limitations. First, we use a laboratory setting in testing our hypotheses. While stated preference experiments are considered realistic purchase scenarios in marketing research (Louviere et al. [2000]), we might question if the realism translates to investment scenarios. Consequently, there may be some threats to the external validity of our study. Participants may be using the information we provide because it is present even if they

would not consider this in real life. However, we find a systematic pattern in how they used the information, and we find that there is a differential use across the clusters which is not consistent with a mechanical approach. Furthermore, there is a well-established literature in experimental finance and economics where experiments, even simple experiments, are a valid methodology to gain insights into the parameters and expectations that underlie the observed market phenomena (Assenza, Bao, Hommes, and Massaro [2014], Sunder [2007]). Similarly, the current experiment has shown that investors do not have homogeneous preferences for family governance so we now know that the aggregate market evidence to date is likely to be the net impact of investors with both positive and negative weights on family governance. To fully understand the extant evidence on aggregate market value of family involvement we need to conduct further experiments to tease out investor preferences, biases and valuation weights. This work may show, as in other areas of economics and finance, that individual investor expectation formation may be a rational processes or may be simple heuristics (Assenza et al. [2014]).

Second, in this study we focus on nonprofessional investors. Therefore, we are limited to making conclusions with respect to this distinct investor group, and our results cannot be extrapolated to institutional investors. However, we screened for and collect data on the investment activity of our respondents. As a result our subjects are active investors and not students like much of the early experimental research in finance (Sunder [2007]). Furthermore, our respondents are representative of private investors that constitute about a third of the US stock market by ownership. While this is a significant proportion the other two thirds are institutional investors whose expectation formation process may be different to private investors. Future work will need to investigate institutions versus private investor behaviours.

Third, we contextualize our experiments in the retail industry, and thus the effects may be limited to this particular industry. However, prior literature has not indicated that this

industry is in any way unique when it comes to the agency issues related to founding family governance. Fourthly, our participants are limited to nonprofessional investors in the United States. It is questionable if similar results would be observed in other cultural settings. Anecdotally, consumers in East Asia have a negative view of family firms as they see them as corrupt and nepotistic, consequently we may find very different results in these cultural settings (Fan and Wong [2002]).

Finally, we use a fixed nominal monetary incentive in our experiments. This may lead to participants to devote insufficient effort in completing the tasks. However, as this would result in non-significant findings (due to random responses), and we find significant results across our two experiments, we thus believe that this is a minor limitation. Further, the market research firm has quality controls that excludes participants for behaviour that results in low quality responses.

Notwithstanding these limitations, our study is unique and contributes to the literature on several issues. Research has thus far focused on aggregate market outcomes of founding family ownership (Anderson and Reeb [2003], Villalonga and Amit [2006]). In contrast, we focus on the micro-decisions of individual nonprofessional investors and explore how they use signals relating to founding family governance. Prior work either explicitly or implicitly assumed investor homogeneity with respect to their preferences and views of founding family ownership. In this paper, we presented evidence that this assumption is violated in the market, as we find significant investor heterogeneity, and specifically two distinct clusters that have conflicting utility curves with respect to founding family ownership. This implies that the simplistic view of investors that the prior literature has used may be incorrect and consequently we believe that there is a fruitful research area in focusing on the micro-decisions of investors to explore this heterogeneity of preferences further.

The current study is but a first step to unravel these issues. Future work can build on our work to tease out what drives heterogeneous preferences with respect to family governance. Do investors entertain varying expectations about the agency behaviour of family agents? Have they been exposed to family firms in prior investments or business experience and this anchors their expectations because of familiarity or prior positive or negative experiences? Are investors adopting simple heuristics that may not be rational? And to what extent do individual investor characteristics aggregate to market behaviour or does institutional behaviour, that may be quite different, drive aggregate market behaviour?

Table 1: Attributes and levels used in experimental design

Experiment	Attribute	Level
One	Net Profit Margin	7%
		8%
		9%
One	Revenue Growth	6%
		7%
		8%
One	Return on Assets	14%
		15%
		16%
One	Price-Earnings Ratio	17
		21
		25
One	Beta (Risk)	1.2
		1.3
		1.4
One and Two	% of Shares Held by Founding Family	0%
		10%
		20%
		30%
One and Two	% of Shares Held by Institutions & Mutual Funds	0%
		10%
		20%
		30%
Two	CEO is a Family Member	No
		Yes
Two	Family Members on the BOD	None
		2 out of 8
		4 out of 8
		6 out of 8

Notes: The table shows the attributes and levels used in the experimental design. Two of the attributes were used in both experiments.

Figure 1: Example of choice task in experiment one

Instructions:

You are considering to invest in a multinational clothing and accessories retailer that is based in the United States. If these were your only options which one would you prefer to invest in?

	Company A	**Company B**	**Company C**
Net Profit Margin	7%	9%	8%
Revenue Growth	8%	6%	6%
Return on Assets	15%	14%	16%
Price-Earnings Ratio	25	17	17
Beta (Risk)	1.3	1.2	1.4
% of Shares Held by Founding Family	0%	20%	30%
% of Shares Held by Institutions & Mutual Funds	20%	0%	10%
Most Preferred Investment	☐	☐	☐
Least Preferred Investment	☐	☐	☐

Notes: An example of a choice task used in the experiment one. Each participant completed ten tasks, with the only difference between the tasks being the levels within each attribute (factor).

Figure 2: Example of choice task in experiment two

Instructions:
This retailer was founded 40 years ago by a family, it is now a multinational corporation and the family is still actively involved in the business. Assuming these three alternatives have the same financial performance, which governance structure and level of family involvement would you prefer the most and which would you prefer the least.

	Option A	**Option B**	**Option C**
Chief Executive Officer	CEO is a family member	CEO is **not** a family member	CEO is a family member
Number of founding family members who sit on the board	None	4 out of 8	6 out of 8
% of Shares Held by Founding Family	10%	20%	30%
% of Shares Held by Institutions & Mutual Funds	10%	30%	10%
Most Preferred	☐	☐	☐
Least Preferred	☐	☐	☐

Notes: An example of a choice task used in experiment two. Each participant completed ten tasks, with the only difference between the tasks being the levels within each attribute (factor).

Table 2: Demographic overview of participants

Variable	Level	n	%
Worked for Family Business	Yes	139	56%
	No	111	44%
From Family Business	Yes	71	28%
	No	179	72%
Gender	Male	129	52%
	Female	121	48%
Age	18-24	17	7%
	25-34	78	31%
	35-49	59	24%
	50-64	48	19%
	65 +	48	19%
Ethnicity	White	188	75%
	Hispanic or Latino	26	10%
	Black or African American	15	6%
	Asian	17	7%
	Other	4	2%
Education	High School	30	12%
	Some College Education	66	26%
	Bachelor's Degree	98	39%
	Master's Degree or above	56	22%
Employment Status	Salary worker	143	57%
	Self-employment	43	17%
	Not working	17	7%
	Retired	47	19%
Investing Experience	Less than 1 year	19	8%
	1-4 years	69	28%
	5-9 years	65	26%
	10 years or more	97	39%
Investing Activity	1-9 trades per year	103	41%
	10-19 trades per year	75	30%
	20-29 trades year	37	15%
	30 or more trades per year	35	14%
Investment Horizon	A few days	32	13%
	A few months	81	32%
	The next year	39	16%
	The next few years	49	20%
	The next 5 to 10 years	32	13%
	Longer than 10 years	17	7%
Risk Tolerance	Substantial risk	57	23%
	Above average risk	95	38%
	Average risk	87	35%
	No risk	11	4%

Notes: Demographical overview of the 250 participants in the experiment.

Table 3: Results from experiment one – the effect of family ownership

		Pooled		Cluster One		Cluster Two		Cluster Three	
Attribute	**Level**	**β**	**SE**	**β**	**SE**	**β**	**SE**	**β**	**SE**
Net Profit Margin	8%	0.218***	(0.040)	0.083	(0.080)	0.430***	(0.064)	0.152*	(0.087)
	9%	0.448***	(0.042)	0.227***	(0.083)	0.922***	(0.068)	0.052	(0.088)
Revenue Growth	7%	0.160***	(0.040)	-0.061	(0.080)	0.307***	(0.062)	0.131	(0.087)
	8%	0.329***	(0.040)	0.196**	(0.081)	0.583***	(0.064)	0.123	(0.087)
Return on Assets	15%	0.130***	(0.040)	0.126	(0.078)	0.218***	(0.063)	0.097	(0.087)
	16%	0.260***	(0.041)	0.264***	(0.081)	0.506***	(0.065)	-0.058	(0.085)
Price-Earnings Ratio	21	-0.049	(0.040)	0.036	(0.081)	0.255***	(0.064)	-0.693***	(0.088)
	25	0.012	(0.041)	0.169**	(0.082)	0.485***	(0.065)	-0.938***	(0.091)
Beta (Risk)	1.3	-0.051	(0.040)	0.099	(0.081)	-0.063	(0.063)	-0.153*	(0.085)
	1.4	-0.217***	(0.041)	-0.172**	(0.081)	-0.447***	(0.064)	0.136	(0.085)
% of Shares Held by Founding Family	10%	0.087*	(0.049)	0.593***	(0.099)	0.030	(0.078)	-0.342***	(0.103)
	20%	0.137***	(0.048)	0.744***	(0.100)	0.097	(0.077)	-0.409***	(0.105)
	30%	0.129**	(0.051)	1.098***	(0.105)	-0.137*	(0.081)	-0.357***	(0.106)
% of Shares Held by Institutions & Mutual Funds	10%	0.294***	(0.049)	0.917***	(0.098)	0.010	(0.077)	0.188*	(0.105)
	20%	0.335***	(0.050)	1.331***	(0.110)	-0.084	(0.078)	0.098	(0.103)
	30%	0.392***	(0.051)	1.941***	(0.116)	-0.180**	(0.079)	-0.160	(0.105)
Observations		12,500		3,850		5,650		3,000	
Pseudo R^2		0.0374		0.1896		0.1132		0.0830	

Notes: The results are estimated using a conditional logit model on exploded choice data from 250 participants who completed 10 choice tasks each, ranking three investments in each task. The cluster model results show a three cluster solution using the Newton-Raphson algorithm. The dependent variable is choice (preferred investment) and the independent variables are the attribute levels. The first level of every variable has been omitted and used as a baseline (7% for net profit margin, 6% for revenue growth, 14% for return on average assets, 17 for price to earnings ratio, 1.2 for beta, 0% for family ownership, and 0% for institutional and mutual fund ownership). Robust standard errors in parentheses. Significance annotations are as follows:

** p .05*
*** p .01*
**** p .001*

Table 4: Results from experiment two – the effect of family governance

		Pooled		Cluster One		Cluster Two		Cluster Three	
Attribute	**Level**	**β**	**SE**	**β**	**SE**	**β**	**SE**	**β**	**SE**
Chief Executive Officer is a family member	Yes	0.075**	(0.034)	0.741***	(0.058)	0.033	(0.082)	-0.569***	(0.060)
Family members on the board of directors	2 out of 8	0.186***	(0.049)	0.532***	(0.083)	0.298**	(0.125)	-0.204**	(0.084)
	4 out of 8	0.092*	(0.049)	0.919***	(0.086)	0.179	(0.122)	-0.824***	(0.084)
	6 out of 8	-0.093*	(0.050)	1.082***	(0.088)	-0.267**	(0.127)	-1.290***	(0.092)
% of Shares Held by Founding Family	10%	0.187***	(0.048)	0.304***	(0.083)	0.741***	(0.127)	-0.038	(0.084)
	20%	0.331***	(0.049)	0.525***	(0.084)	1.103***	(0.133)	-0.103	(0.081)
	30%	0.355***	(0.050)	0.763***	(0.089)	1.286***	(0.139)	-0.377***	(0.086)
% of Shares Held by Institutions & Mutual Funds	10%	0.276***	(0.049)	0.159*	(0.081)	1.183***	(0.138)	0.050	(0.084)
	20%	0.366***	(0.049)	0.216**	(0.084)	2.059***	(0.149)	-0.080	(0.083)
	30%	0.373***	(0.050)	0.094	(0.083)	2.524***	(0.160)	-0.199**	(0.086)
Observations		12,500		4,950		2,700		4,850	
Pseudo R^2		0.0200		0.1287		0.2668		0.1181	

Notes: The results are estimated using a conditional logit model on exploded choice data from 250 participants who completed 10 choice tasks each, ranking three options in each task. The cluster model results show a three cluster solution using the Newton-Raphson algorithm. The dependent variable is choice (preferred investment) and the independent variables are the attribute levels. The first level of every variable has been omitted and used as a baseline (Family member is not the CEO, No family members are on the board, 0% family ownership, and 0% institutional and mutual fund ownership). Robust standard errors in parentheses. Significance annotations are as follows:
** p .05*
*** p .01*
**** p .001*

Table 5: Prediction of cluster membership

	Experiment One				Experiment Two			
	Cluster Two		Cluster Three		Cluster Two		Cluster Three	
	β	SE	β	SE	β	SE	β	SE
Family Business Attitude	-0.317	(0.206)	-0.414*	(0.217)	-0.0761	(0.218)	-0.483**	(0.196)
Worked for Family Business								
No	0.326	(0.421)	0.475	(0.479)	0.229	(0.505)	-0.189	(0.387)
From Family Business								
No	0.526	(0.454)	0.332	(0.510)	0.314	(0.516)	0.193	(0.441)
Gender								
Female	-0.522	(0.397)	-0.594	(0.406)	0.0875	(0.451)	-0.355	(0.358)
Age								
25-34	0.689	(0.714)	0.432	(0.775)	-0.208	(0.906)	-0.0641	(0.741)
35-49	1.432*	(0.792)	0.590	(0.877)	0.249	(1.039)	-0.261	(0.783)
50-64	1.031	(0.880)	0.744	(0.968)	1.788	(1.172)	0.383	(0.846)
65 +	-0.0206	(1.047)	0.517	(1.143)	3.135**	(1.423)	0.116	(1.067)
Ethnicity								
Hispanic or Latino	0.478	(0.670)	0.322	(0.767)	-0.458	(0.796)	0.0677	(0.624)
Black or African American	-1.043*	(0.630)	0.226	(0.677)	-0.388	(0.754)	-1.365**	(0.623)
Asian	-1.260*	(0.696)	-1.464	(0.946)	1.761**	(0.761)	0.0803	(0.756)
Other	0.248	(1.118)	-13.62***	(1.005)	-14.89***	(1.258)	-0.843	(1.066)
Education								
Some College Education	-0.375	(0.576)	0.0401	(0.733)	-0.177	(0.780)	0.161	(0.681)
Bachelor's Degree	0.686	(0.538)	0.408	(0.670)	0.621	(0.669)	1.012	(0.622)
Master's Degree or above	-0.0839	(0.618)	0.510	(0.718)	0.883	(0.754)	1.791**	(0.711)
Employment Status								
Self-employment	0.267	(0.556)	0.0479	(0.558)	0.138	(0.635)	0.00645	(0.533)
Not working	1.233	(0.945)	1.011	(0.944)	-0.00372	(0.926)	0.333	(0.695)
Retired	0.145	(0.675)	-0.523	(0.740)	-0.595	(0.734)	0.0929	(0.701)
Investing Experience								

	Experiment One				Experiment Two			
	Cluster Two		Cluster Three		Cluster Two		Cluster Three	
	β	SE	β	SE	β	SE	β	SE
1-4 years	0.198	(0.662)	-0.0191	(0.847)	0.00995	(0.780)	-0.183	(0.772)
5-9 years	0.532	(0.753)	0.819	(0.943)	-0.563	(0.877)	-0.233	(0.824)
10 years or more	-0.629	(0.718)	-0.0420	(0.936)	-0.673	(0.955)	-0.0101	(0.879)
Investing Activity								
10-19 trades per year	-1.309***	(0.454)	-1.040**	(0.510)	-0.260	(0.504)	-0.682	(0.427)
20-29 trades year	-0.246	(0.603)	0.700	(0.617)	0.0678	(0.660)	-0.0571	(0.576)
30 or more trades per year	0.689	(0.613)	0.810	(0.668)	-1.147	(0.712)	-0.660	(0.530)
Investment Horizon								
A few months	0.637	(0.590)	-0.161	(0.626)	-0.418	(0.725)	-1.099**	(0.555)
The next year	0.973	(0.694)	-0.402	(0.789)	0.448	(0.818)	-0.249	(0.652)
The next few years	-0.134	(0.710)	-0.411	(0.721)	0.125	(0.830)	-0.236	(0.650)
The next 5 to 10 years	0.592	(0.735)	-0.380	(0.776)	-0.997	(0.997)	-1.124*	(0.643)
Longer than 10 years	1.285	(0.918)	-0.219	(1.048)	-0.395	(1.103)	-1.281	(0.831)
Risk Tolerance								
Above average risk	-0.0650	(0.538)	-0.00366	(0.584)	-0.808	(0.639)	0.431	(0.488)
Average risk	-0.240	(0.525)	-0.510	(0.610)	-1.240*	(0.666)	0.131	(0.516)
No risk	0.979	(1.455)	0.352	(1.341)	-2.065	(1.536)	0.620	(0.864)
Constant	-0.759	(1.078)	-0.693	(1.244)	-0.726	(1.509)	0.159	(1.083)
Observations	250				250			
Pseudo R^2	0.1486				0.1619			

Notes: The results are estimated using a multinomial logit model using cluster one as the base outcome. The dependent variable is cluster membership (based on the respective experiments) and the independent variables are the covariates (family business attitude, gender, age, ethnicity, education, employment, investment experience, investment activity, investment horizon and risk tolerance). Family business attitude is the factor score based on the nine item family business attitude scale – see appendix A). The first level of every categorical variable has been omitted and used as a baseline (Worked for Family Business: Yes; From Family Business: Yes; Gender: Male; Age: 18-24; Ethnicity: White; Education: High school; Employment Status: Salary worker; Investing Experience: Less than 1 year; Investing Activity: 1-9 trades per year; Investment Horizon: A few days; Risk Tolerance: Substantial risk). Robust standard errors in parentheses. Significance annotations are as follows:

** p .10*

*** p .05*

**** p .01*

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Appendix A

Family Business Attitude Scale

To what extent do you think family businesses typically exhibit these characteristics (compared to non-family businesses)?

	Much less	**Less**	**A little less**	**Similar**	**A bit more**	**More**	**Much more**
Quality of products or services	◯	◯	◯	◯	◯	◯	◯
Innovativeness	◯	◯	◯	◯	◯	◯	◯
Ability to attract, develop, and keep talented people	◯	◯	◯	◯	◯	◯	◯
Responsibility to the community and the environment	◯	◯	◯	◯	◯	◯	◯
Trustworthiness	◯	◯	◯	◯	◯	◯	◯
Quality of management	◯	◯	◯	◯	◯	◯	◯
Competitiveness	◯	◯	◯	◯	◯	◯	◯
Profit-driven	◯	◯	◯	◯	◯	◯	◯
Long-term investment value	◯	◯	◯	◯	◯	◯	◯

Investment Horizon and Risk Tolerance Measures

When purchasing stocks, what typical time period do you invest for?

◯ A few days

◯ A few months

◯ The next year

◯ The next few years

◯ The next 5 to 10 years

◯ Longer than 10 years

Which of the following statements comes closest to the amount of financial risk that you are willing to take when you save or make investments?

◯ Take substantial financial risk expecting to earn substantial returns

◯ Take above average financial risks expecting to earn above average returns

◯ Take average financial risks expecting to earn average returns

◯ Not willing to take any financial risks